

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A system for stirring a solid suspended in a liquid in a sample vessel, said system comprising:

a sample vessel;

a sample vessel holder, adapted to receive at least one said sample vessel and maintain said sample vessel in a position such that the longitudinal axis of said sample vessel extends at an angle substantially less than 90 degrees with respect to the horizontal;

a stirrer within said sample vessel; and

a magnet driver, adapted to move a magnet proximate to an outer surface of said sample vessel to permit said magnet to impose a magnetic influence on said stirrer to move said stirrer in said sample vessel, and wherein said magnet rotates about an axis horizontal with respect to the longitudinal axis of said sample vessel.

2. (Original) A system as claimed in claim 1, wherein said magnet driver device comprises:

a magnet shaft assembly having said magnet coupled thereto; and

a motor, adapted to move said magnet shaft assembly to move said magnet proximate to said outer surface of said sample vessel and away from said outer surface of said sample vessel.

3. (Original) A system as claimed in claim 2, wherein:
said magnet shaft assembly is rotatable; and

said motor rotates said magnet shaft assembly to move said magnet proximate to said outer surface of said sample vessel and away from said outer surface of said sample vessel.

4. (Original) A system as claimed in claim 2, wherein:
said motor is magnetically coupled to said magnet shaft assembly.

5. (Original) A system as claimed in claim 1, wherein:
said stirrer includes a ferrous metal; and
said magnet imposes said magnetic influence on said ferrous material.

6. (Original) A system as claimed in claim 1, wherein:
said magnet driver is adapted to move said magnet such that said magnetic influence moves said stirrer along a side wall of said sample vessel.

7. (Original) A system as claimed in claim 1, wherein:
said magnet driver is further adapted to move said magnet away from said outer surface of said sample vessel to allow gravity to move said stirrer toward a bottom of said sample vessel.

8. (Original) A system as claimed in claim 1, wherein:
said magnet includes a rare earth magnet.

9. (Original) A system as claimed in claim 1, wherein:
said sample vessel holder, is adapted to receive a plurality of said sample vessels and maintain each of said sample vessels in a respective position such that the longitudinal axis of said each sample vessel extends at a respective angle substantially less than 90 degrees with respect to the horizontal; and
said magnet driver, is adapted to move each of a plurality of magnets proximate to an outer surface of a respective one of said sample vessels to permit said